BROADCAST INCENTIVE AUCTION REVERSE AUCTION BIDDER DATA FILES

Table of Contents

1.	Introduction				
		der Download Files			
	2.1.	My Stations file			
	2.2.	My Bids File			
,	2.3.	My Results			
		pendix: Data Type Definitions			

1. Introduction

This document provides the data file specifications for the download files that will be available to bidders during the reverse auction. Each file specification includes the format of the file and definitions of the data elements in the files including a name, description, data type, examples and notes.¹ Data type definitions and notation rules are explained in an appendix attached to this document.

In addition to the data file specifications, a sample data file for each file is available on the Auction 1001 website (http://www.fcc.gov/auctions/1001) in the Data section. The sample data files show — for a bidder with four stations — station data, bids, and results over the course of several rounds. In particular, the files labeled with the additional marker of "-stage1" demonstrate for a bidder with three UHF stations and one High-VHF station the bidder's initial results at the start of the stage for all its stations as well as the bids submitted each round and the results of bid processing for each of the bidder's stations during the first fourteen rounds of the stage. While not a complete stage of bidding, the files demonstrate various bidding statuses and cover a variety of bid options. The sample data also includes proxy instructions entered by the bidder and bids submitted by a proxy agent in subsequent rounds. The files labeled with the additional marker of "-stage2" demonstrate the bidder's initial results at the start of a second stage for all its stations as well as the bids submitted each round and the results of bid processing for each of the bidder's stations during the first seven rounds of the stage. During this second stage only two of the bidder's stations remain in the auction, and both remaining stations start the stage with a bidding status of "Frozen-Pending Catch Up".

The bidder and station information in the sample files is fictional and provided for illustration purposes only. Any similarity to actual company names, FCC Registration Numbers (FRNs), or other personal information is coincidental. We emphasize that the scenarios and bidding examples provided are not meant to reflect any predictions or assumptions by the Commission regarding bidding activity, the number of rounds, or the outcome of the incentive auction.

2. Bidder Download Files

This section provides the specifications of the download files available to bidders during the reverse auction.

2.1. My Stations File

File name: my-stations.csv

The My Stations file contains static information about the bidder's qualified stations including the relinquishment options the bidder selected for the station on its Form 177. This file is available throughout the auction.

¹ The terminology used in this Public Notice is defined in the technical appendices to the *Auction 1000 Application Procedures Public Notice*. *See Application Procedures for Broadcast Incentive Auction Scheduled to Begin on March 29, 2016; Technical Formulas for Competitive Bidding*, AU Docket No. 14-252, GN Docket No. 12-268, WT Docket No. 12-269, Public Notice, DA 15-1183 (WTB rel. Oct. 15, 2015) (*Auction 1000 Application Procedures Public Notice*).

² The Auction 1001 website provides a single ZIP file containing the individual CSV files. During the reverse auction, the Auction System provides each of the CSV files separately.

File Structure:

- CSV file (first row contains header).
- One record for each of the bidder's qualified stations

Field	Description	Data type	Example/Notes
auction_id	The FCC auction number for the reverse auction	String	1001
call_sign	The station's call sign	String	WXYZ
facility_id	The station's facility ID	Integer {1,7}	8888
dma_state	The state associated with the station's Designated Market Area	String {2}	MD
pre-auction_band	The band in which the station is operating before the auction	String [Low-VHF High-VHF UHF]	Low-VHF
volume	The station's volume ³	Integer	1000
off-air_option	Indicates if the bidder selected the go off-air option for the station on its Form 177	Character [Y N]{1}	Y
lvhf_option	Indicates if the bidder selected the move to Low-VHF option for the station on its Form 177	Character [Y N]{1}	N
hvhf_option	Indicates if the bidder selected the move to High-VHF option for the station on its Form 177	Character [Y N]{1}	Y
off-air_opening_price	The station's opening price offer for the go off-air option	Integer	113896800
lvhf_opening_price	The station's opening price offer for the move to Low-VHF option	Integer	75931200 Null if there is no applicable opening price offer
hvhf_opening_price	The station's opening price offer for the move to High-VHF option	Integer	37965600 Null if there is no applicable opening price offer

³ A station's volume is based on its interference-free population and number of constraints. *See Broadcast Auction Scheduled to Begin March* 29, 2016; *Procedures for Competitive Bidding in Auction* 1000, *Including Initial Clearing Target Determination, Qualifying to Bid, and Bidding in Auctions* 1001 (*Reverse*) and 1002 (*Forward*), Public Notice, 30 FCC Rcd 8975, 9017, para. 65 (2015) (*Auction* 1000 *Bidding Procedures Public Notice*).

2.2. My Bids File

File name: my-bids.csv

The My Bids file provides a list of all the bids considered by the Auction System for a bidder in rounds that have already closed and bids that were submitted so far in an open round. Each bid pertains to a relinquishment option at the corresponding clock price and, where applicable, a fallback option.

The file also includes proxy instructions either submitted by a bidder in the round or proxy instructions that were submitted in a previous round but are still valid. A proxy instruction for a station specifies a proxy bid price such that the system will automatically submit a bid for the station for its currently held option as long as the current clock price offer is greater than or equal to the proxy bid price. Once the current clock price for that option is below the proxy instruction amount, the system will no longer submit bids for the station by proxy. Where valid proxy instructions exist, the file will also include the bids placed by the Auction System by proxy. For bidders that have submitted proxy instructions for stations with status *Frozen* (*Currently Infeasible*) or *Frozen* (*Pending Catch Up*) in the round, the file will include a record of the submitted proxy instruction without any associated bid information.

The file does not contain bids/proxy instructions that were submitted and subsequently modified or deleted while a round was open. Rather the file contains the list of bids/proxy instructions the Auction System is currently considering or did consider for that bidder in the associated round.

If a bidder does not place a bid in a round for one of its stations with status *bidding*, during bid processing of the round the Auction System will automatically submit a bid to drop out of bidding for that station. Any system-generated bids to drop out of bidding will appear in the My Bids file once round results are posted.

In addition to providing information about each bid/proxy instruction and the authorized bidder submitting the bid/proxy instruction, the file provides such information for a station in a round as the station's bid status, its held relinquishment option, and any proxy instructions entered in a previous round that are still valid in the round.

The file is available once the first round of bidding begins in a stage. The file contains data for all rounds in a stage. There is a separate file for each stage.

File Structure:

- CSV file (first row contains header).
- One record for each round and bid/proxy instruction combination.

Field	Description	Data Type	Examples/Notes
auction_id	The FCC auction number for	String	1001
	the reverse auction		
stage	Stage number	Integer	1
round	Round number	Integer	11
bidder	Bidder name	String	Company XYZ
		{0,50}	"ABC, Inc."

Federal Communications Commission

Field	Description	Data Type	Examples/Notes
frn	The bidder's FCC Registration Number (FRN) which uniquely identifies a bidder	Alpha-numeric {10}	0003645843
call_sign	The station's call sign	String {0,50}	WXYZ
facility_id	The station's facility ID	Integer {1,7}	8888
pre-auction_band	The band in which the station is operating before the auction.	String [Low-VHF High- VHF UHF]	UHF
round_station_stat us	The station's bid status during the round, before bids for the round are processed.	String [Bidding Frozen (Currently Infeasible) Frozen (Pending Catch Up)]	Bidding
round_held_option	The option held in the round (i.e. the option assigned as a result of last round's bid processing).	String [Go off-air Move to Low-VHF Move to High- VHF]	Go off-air
bid_option	The preferred bid option submitted by the bidder in the round or the preferred bid option submitted by a proxy agent.	String [Go off-air Move to Low-VHF Move to High-VHF Drop out of bidding]	Move to Low-VHF Null in proxy instruction records for frozen stations.
bid_option_price	Clock price associated with the bid option	Integer	Null for the "Drop out of bidding" option and in proxy instruction records for frozen stations.
fallback_option	The fallback bid option when Move to Low-VHF or Move to High-VHF is the preferred bid option.	String [Go off-air Move to Low-VHF Move to High- VHF Drop out of bidding]	Go off-air Null in proxy instruction records for frozen stations or if a fallback was not applicable.
fallback_option_price	Clock price associated with the fallback bid option	Integer	Null in proxy instruction records for frozen stations or if a fallback was not applicable.

Field	Description	Data Type	Examples/Notes
proxy_amount	Proxy instructions i.e. proxy bids will be placed for the station for its currently held option until the clock price is below this amount.	Integer	Null if there are no applicable proxy instructions.
entered_by	Name of authorized bidder or telephonic bid assistant who submitted the bid, or "Proxy Agent" if the bid was submitted in accordance with proxy instructions, or "System – Missing Bid" if a bid to drop out of bidding was submitted by the system.	String {0,50}	Karen Smith
entered_time	Time of bid/proxy instruction submission	YYYY-MM-DD HH:MM:SS	2016-01-21 11:01:28 All time stamps are in Eastern Time.
status	Status of the bid/proxy instruction.	String [Submitted Posted]	Submitted Submitted - for bids/proxy instructions in the current round Posted - for bids/proxy instructions that have been processed and the results have been posted.

2.3. My Results File

File name: my-results.csv

The My Results file provides a list of the results of bid processing for a bidder in a given round. The file contains all of the bidder's qualified stations even if the station has previously dropped out of bidding. For each station the file gives the bid option assigned to the station as a result of bid processing and the associated price. It also provides the station's status after bid processing, applicable vacancy index intervals and price offers for the next round.

In addition to providing the results of bid processing for each of the bidder's qualified stations, the file provides information about each of the bidder's stations in the round including the station status and held option before bid processing as well as, for stations with status *bidding*, the bids placed in the round.

In advance of the initial clock round of the first stage of the auction, the file will contain the initial bid option assigned to the station during the process of determining the initial clearing target and the associated opening price offer. Before the first round of any subsequent stage, the file will contain either the bid option the station was assigned at the close of the previous stage and its associated price or, as a result of the new clearing target, an indication that the station is no longer needed in the auction.

The data pertaining to bidding results for a round is available in the file once the round results have been posted. The file contains data for all rounds in a stage. There is a separate file for each stage.

File Structure:

- CSV file (first row contains header).
- The file contains one record for each round and qualified station combination.

Field	Description	Data Type	Examples/Notes
auction_id	The FCC auction number	String	1001
	for the reverse auction		
stage	Stage number	Integer	1
round	Round number	String	11
			At the start of a stage, this field will be "Initial Option" to indicate results related to the station's status and held option after the clearing target for the stage has been set.
bidder	Bidder name	String {0,50}	Company XYZ "ABC, Inc."
frn	The bidder's FCC Registration Number (FRN) which uniquely identifies a bidder	Alpha-numeric {10}	0003645843
call_sign	The station's call sign	String {0,50}	WXYZ
facility_id	The station's facility ID	Integer {1,7}	8888
pre-auction_band	The band in which the station is operating before the auction	String [Low-VHF High-VHF UHF]	UHF
round_station_stat us	The station's status during the round, before bids for the round are processed.	String [Bidding Exited (Voluntary) Exited (Not Needed) Exited (In a Previous Stage) Frozen (Currently Infeasible) Frozen (Provisional Winner) Frozen (Pending Catch Up)]	Bidding Null for initial status and option results.

Federal Communications Commission

Field	Description	Data Type	Examples/Notes
round_held_option	The option held in the round (i.e. the option assigned as a result of last round's processing).	String [Go off-air Move to Low-VHF Move to High-VHF Drop out of bidding]	Go off-air Null for initial status and option results.
		or ordering)	Null if the station exited in the last round.
bid_option	The preferred bid option submitted by the bidder in the round or the preferred bid option submitted by a proxy agent.	String [Go off-air Move to Low-VHF Move to High-VHF Drop out of bidding]	Move to Low-VHF Null for initial status and option results. Null in proxy instruction
bid_option_price	Clock price associated with	Integer	records for frozen stations. 50000000
	the bid option.		Null for initial status and option results.
			Null in proxy instruction records for frozen stations.
fallback_option	The fallback bid option when Move to Low-VHF or Move to High-VHF is the preferred bid option.	String [Go off-air Move to Low-VHF Move to High-VHF Drop out of bidding]	Go off-air Null in proxy instruction records for frozen stations or if a fallback was not applicable.
fallback_option_price	Clock price associated with the fallback bid option	Integer	50000000 Null in proxy instruction records for frozen stations or if a fallback was not applicable.
held_option_after_ processing	The option held after bids in the round have been processed. Before the first round of a stage, the option held at the start of the stage.	String [Go off-air Move to Low-VHF Move to High-VHF Drop out of bidding]	Go off-air Null if the station has already exited the auction.
price	The price offer associated with the held option.	Integer	Null if the station has already exited the auction.

Federal Communications Commission

Field	Description	Data Type	Examples/Notes
station_status_after _processing	The status of the station after bids in the round have been processed. Before the first round of a stage, the status of the station at the start of the stage.	String [Bidding Exited (Voluntary) Exited (Not Needed) Exited (In a Previous Stage) Frozen (Currently Infeasible) Frozen (Provisional Winner) Frozen (Pending Catch Up)]	Bidding
vacancy_lvhf	The station's vacancy index interval for Low-VHF after bids in the round have been processed. Before the first round of a stage, the station's vacancy index interval for Low-VHF at the start of the stage.	String	0.7 to 2.0 Null if not applicable.
vacancy_hvhf	The station's vacancy index interval for High-VHF after bids in the round have been processed. Before the first round of a stage, the station's vacancy index interval for High-VHF at the start of the stage.	String	0.5 to 1.3 Null if not applicable.
vacancy_uhf	The station's vacancy index interval for UHF after bids in the round have been processed. Before the first round of a stage, the station's vacancy index interval for UHF at the start of the stage.	String	6.0 to 16.0 Null if not applicable.
next_price_off-air	The station's next round clock price offer to go offair.	Integer	113896800 Null if not applicable.
next_price_lvhf	Station's next round clock price offer to move to Low-VHF.	Integer	75931200 Null if not applicable.
next_price_hvhf	Station's next round clock price offer to move to High-VHF.	Integer	37965600 Null if not applicable.

3. Appendix: Data Type Definitions

The following is a guide to interpreting data types defined in this document. This guide is based on regular expressions used in XML standards.

Valid Data Types used in this Document

Character: A character is a single standard ASCII character. The following list has examples of valid ASCII characters:

- a
- D
- 3
- %

String: A string contains one or more characters and can contain whitespace. The following list has examples of valid strings:

- PEA001
- 005
- 588.3-593.3 MHz + 628.3-633.3 MHz
- Huntsville-Decatur-Florence, AL

Note that strings containing a comma that are included in a CSV formatted file need to include quotation marks around them. In the above example, "Huntsville-Decatur-Florence, AL" would be the correct format for the string in a CSV file.

Numeric: Numeric is a generic data type that covers a number of different underlying data types. As a result, anything defined as numeric could be any of the following:

- Decimal
- Integer

Integer: The integer data type is used to specify a numeric value without a fractional component.

- It's assumed that any Integers defined in this document are unsigned and never include a (+) plus or (-) minus sign. Any signed Integers containing a + or are considered invalid.
- If the Integer is of defined length then curly brackets should be used. E.g., {3} indicates the integer should be exactly 3 numbers long.

The following list has examples of valid Integers:

- 009
- 9
- 2147483647

The following list has examples of *invalid* Integers:

- -009
- +009

Restricting values for a data type

Restrictions are used to define acceptable values for any given data type. The following lexicon is used when defining data types:

- Square brackets define the *pattern*.
 - o e.g., [A-L] means only the uppercase letters A through L are allowed.
 - \circ e.g., [U|D] means only the uppercase letters U or D are allowed.
 - o e.g., [0-9] means only the numbers 0 through 9 are allowed
- Curly brackets define the *length* including whitespace.
 - o e.g., {3} means the value has to be exactly 3 characters long.
 - o e.g., {1,3} means the value has to be a minimum of 1 character and a maximum of 3 characters.
 - o e.g., {0,50} means the value has to be a minimum of 0 characters and a maximum of 50 characters.

Example 1:

The Data Type is defined as follows:

Integer

{3}

The curly brackets mean only a 3 digit integer is allowed.

Valid Values for example 1:

- 009
- 056
- 102

Invalid Values for example 1:

- 09
- 3502
- 1
- +12
- -35

Example 2:

The Data Type is defined as follows:

String

 $[A-L]{1}$

The square brackets mean only the uppercase letters A through L are allowed and the curly brackets mean it must be exactly 1 character long.

Valid Values for example 2:

- B
- L

Invalid Values for example 2:

- 8
- M

• 6

Example 3:

The Data Type is defined as follows:

```
String [0-9]{3}
```

The square brackets mean only the numbers 0 through 9 are allowed and the curly brackets mean it must be 3 characters long.

Valid Values for example 3:

- 001
- 023
- 358

Invalid Values for example 3:

- 2
- 01
- 2026

Example 4:

The Data Type is defined as follows:

```
String [0-9]{1,2}
```

The square brackets mean only the numbers 0 through 9 are allowed and the curly brackets mean it must be a minimum of 1 character long and a maximum of 2 characters long.

Valid Values for example 4:

- 4
- 04
- 41

Invalid Values for example 4:

- 123
- Blank or null value

Example 5:

The Data Type is defined as follows:

```
String [US|CA|MX]{2}
```

The square brackets mean the pattern must be either US, CA or MX. The curly brackets mean it must be exactly 2 characters long.

Valid Values for example 5:

- US
- CA

Invalid Values for example 5:

• C

• USA

Example 6:

The Data Type is defined as follows:

```
String
```

([PEA][0-9] [0-9] [0-9]){6}

The square brackets inside the round brackets mean the pattern must be a concatenation of the text "PEA" followed by three single numbers, with each number ranging from 0 through 9. The curly brackets mean it must be exactly 6 characters long.

Valid Values for example 6:

- PEA002
- PEA356

Invalid Values for example 6:

- PEA0001
- PEA-005
- PEA-05
- PEA-0512
- PEA-2

Example 7:

The Data Type is defined as follows:

String

{0,50}

The absence of square brackets mean there are no restrictions to the characters in this string. The curly brackets mean it must be a minimum of 0 characters long (i.e., can be blank/null) and a maximum of 50 characters long.

Valid Values for example 7:

- 588.3-593.3 MHz + 628.3-633.3 MHz
- Albuquerque-Santa Fe, NM

Invalid Values for example 7:

- Greenville-Spartanburg, SC-Asheville, NC-Anderson, SC
- This is an invalid string which is longer than 50 characters including spaces.